Press Release **Feb 12, 2003**

Fleet Numerical Meteorology and Oceanography Center Selected for High Performance Computing Distributed Centers Project Funding

Monterey,CA--The Deputy Under Secretary of Defense (Science & Technology) has announced that Fleet Numerical Meteorology and Oceanography Center (FNMOC) in Monterey, CA was among four high performance computing (HPC) centers selected to receive funding from the Department of Defense (DoD) High Performance Computing Modernization Program (HPCMP). The HPC awards are to be applied to local, mission-specific, and technical challenges identified in each center's proposal. These projects will be funded during the coming year to procure HPC systems.

Fleet Numerical will use this award to augment the high performance computing (HPC) resources of the Coupled Ocean/Atmosphere Mesoscale Prediction System (COAMPS™). The COAMPS™ mesoscale atmospheric model has been operational at FNMOC since 1998, and has become the meteorological model of choice for many DoD applications. The focus of the HPC effort is to run COAMPS™ at very high horizontal spatial resolutions that are not yet operationally possible.

Currently, COAMPS™ is run operationally at a maximum horizontal resolution of 9 km, which is too coarse to fully support DoD requirements for highly detailed weather forecasts. The HPC hardware will enable COAMPS™ to be run in real time at horizontal spatial resolutions of a few kilometers in support of both R&D and rapid transition to operations.

In particular, this hardware will allow COAMPS™ to be run in real time at a resolution of 3 km for the Monterey Bay region in support of R&D efforts associated with the Central California Environmental Prediction Initiative (CCEPI). This plan will use the region as a "natural laboratory" for developing very high-resolution meteorological and oceanographic prediction capabilities. The results of this R&D would be transitioned rapidly into operations at FNMOC, allowing COAMPS™ to be run at resolutions of about 3 km in real time in areas of high interest to DoD.

As an important related effort, model post-processing functions that have been traditionally done on single-processor workstation class machines will be ported to the multi-processor HPC environment to speed up delivery of highly perishable model products to customers.

The DoD High Performance Computing Modernization Program was established in 1992 in response to a requirement to modernize the HPC capabilities of the DoD. The HPCMP is currently striving to maintain the United States' technological supremacy over its adversaries and to increase the flow of this improved technology into warfighting support systems.

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